



ITZ

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Applicant:	Joseph A. Bobier	)	
		)	
Serial No:	10/765,442	)	Group Art Unit: 2631
		)	
Filed:	January 27, 2004	)	Examiner: Bocure, Tesfaldet
		)	
For:	Integer Cycle Frequency Hopping	)	
	Modulation For the Radio Frequency	)	
	Transmission of High Speed Data	)	
		)	
Attorney Docket:	P031696-08UT	)	

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Mail Stop AMENDMENT  
Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ An Office Action Response (mailed October 31, 2006) (10 pages);
- ☒ Spectral Plots (2 pages);
- ☒ Credit Card Authorization Form in the amount of \$510.00 to cover the 3<sup>rd</sup> month extension fee;
- ☒ Transmittal letter and Return Receipt Postcard.

April 13, 2007

Date

By

Dennis L. Cook  
Reg. No. 30,826  
Attorney for Applicant

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service "Priority Mail" service under 37 CFR 1.10 and is addressed to Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date: April 13, 2007.

Submitted by:

Amy E. O'Hara



Title: "Integer Cycle Frequency Hopping  
Modulation For The Radio Frequency  
Transmission of High Speed Data"  
Serial No. 10/765,442

Attorney Docket No. P031696-08UT  
Responsive to Office Action Mailed October 31, 2006  
Date: April 13, 2007

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

Applicant:	Joseph A. Bobier	)	
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Serial No:	10/765,442	)	Group Art Unit: 2611
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Filed:	January 27, 2004	)	Examiner: Bocure, Tesfaldet
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For:	Integer Cycle Frequency Hopping	)	
	Modulation For The Radio Frequency	)	
	Transmission of High Speed Data	)	
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Mail Stop AMENDMENT  
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Alexandria, VA 22313-1450

Dear Sir:

**RESPONSE**

In his Office Action mailed October 31, 2006, the Examiner rejected the amended claims as being anticipated and non-obvious in light of Iishi. The Examiner had previously rejected the claims, as previously amended with the added limitation"--- resulting in a spectral output of multiple frequencies spread over a broad spectral band during said altered 360 degree cycle," stating they contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the previous amendment Applicant amended claims 1, 3, 9, and 12 by removing the previously added limitation and instead added the language directly from the original specification in paragraphs 36 and 61 describing the resulting wave form in order to put this application in condition for allowance.

The Examiner now states the last added limitation is not sufficient to avoid the prior art, namely Iishi.

Applicant believes this application is significantly different from Iishi, which discloses a FSK system, and that the previously added limitation is just a statement of the physical result of what was originally stated in the specification in paragraphs 36 and 61 (as previously shown in the prior submitted spectral plots) but not originally in the claims, that is that "the spectral output of a transmitting device using this modulation scheme will be defined by the difference in frequency between the main carrier signal and the modulating frequency" which is in fact an output of multiple frequencies spread over a broad spectral band when the alteration of the 360 degree cycle occurs. Applicant has attached spectral plots showing that a typical FSK signal as generated by as system such as Iishi's and the Integer Cycle Modulation system as disclosed in this application both operating at 1GigHz and 915MHz. These plots show the significant difference between an FSK system and an Integer Cycle system. This difference is based on the fact that in the Integer Cycle Modulation system as disclosed the change of frequency from the carrier (F0) to the modulation event (F1) starts at the precise zero degree phase angle and ends at precisely the 360 degree phase angle thus reducing the spurious emission on the spectrum. Applicant has added this additional limitation to the claims to distinguish this disclosure from Iishi.

Applicant certainly appreciates the Examiner's assistance in this matter and now believes the claims with the previously added limitation and the newly added limitation clearly point out the invention as distinguished from Iishi and as disclosed in the original application and also that no new matter was added. Applicant respectfully requests the Examiner allow this important application, as amended, to proceed to issuance.